

TYPE

Cyclized rubber

USES

Chemically resistant paints; anticorrosion paints; zinc-rich paints

FORM OF DELIVERY (f.o.d.)

60% in white spirit

PRODUCT DATA

The data are determined by our quality control for each batch (lot) before release.

Determined per batch:

Dynamic Viscosity (Ubbelohde) DIN 51377
 dynamic viscosity [mPa.s] 2400 - 3600
 50 % white spirit
 (23°C)

Iodine Colour Number DIN 6162
 iodine colour number <= 30
 50 % white spirit

Not continually determined:

Colour Scale (Gardner) DIN EN ISO 4630-1
 Gardner colour value <= 11

Density (Liquids) DIN EN ISO 2811-2
 density [g/cm³] 0.9
 (20°C)

Flash Point DIN EN ISO 1523
 flash point [°C] 36

DILUTABILITY

Special white spirit 100/140	●	Cyclohexanone	●
White spirit	●	Ethyl acetate	⊙
Turpentine	●	Butyl acetate	●
Xylene	●	Methoxypropyl acetate	○
Solvent naphtha	●	Methoxypropanol	○
Trichlorethylene	●	Ethanol	○
Acetone	○	Butanol	○
Methyl ethyl ketone	⊙		
●	unlimited dilutability	⊙	limited dilutability
●	substantial dilutability	○	very limited or no dilutability

COMPATIBILITY

% ALPEX CK 450	90	75	50	25	10
% other binder	10	25	50	75	90
Drying oils (cold mix)					
Refined linseed oil	●	●	●	●	●
Linseed oil-stand oil 30 dPa.s, 60 dPa.s, 90 dPa.s	●	●	●	●	●
Alkyd resins					
VIALKYD® AR 680	●	●	●	●	●
SETAL® 270 SM-70	●	●	○	○	○
Other binders					
Nitrocellulose 1/2s	○	○	○	○	○
Plasticizers					
Chlorparaffin 40 fl. 50 fl.	●	●	○	○	○
Chlorparaffin 70 fl., 70 fest	●	●	●	○	○
Hordaflex LC, LC 50	●	○	○	○	○
Di butyl phthalate	●	○	○	○	○
RESAMIN® HF 480	●	●	○	○	○
●	definite compatibility				
○	very limited or no compatibility				

PROPERTIES AND USES

ALPEX CK 450 is a synthetic resin based on cyclized rubber. Paints based on ALPEX CK 450 are drying by solvent evaporation. The originally reversible solubility of the films gradually diminishes through reaction of oxygen. As sole binding agent ALPEX CK 450 is very brittle, and it is normally used in conjunction with plasticizers, drying oils and alkyd resins such as VIALKYD® AR 680.

ALPEX CK 450 combinations as a start point:

	a	b	c	d
ALPEX CK 450 (solid resin)	65 - 55	55 - 50	40 - 35	25 - 20
Plasticizer (unsubonifiable)	35 - 45	40 - 35	25 - 20	15 - 10
Alkyd resin (solid) or stand oils	-	5 - 15	35 - 45	60 - 70

- a) Chemically resistant paints for internal coating of tanks, pipelines and equipment where the paint is in continuous contact with aggressive media such as acids, alkalis or salt solutions. These paints are not resistant to weathering.
 - b) Paints with limited resistance to chemicals primarily for interior surfaces continuously exposed to less aggressive media.
 - c) Anticorrosion paints with limited or short-term resistance to chemicals for plant structures in the open.
 - d) Weather-resistant anticorrosion paints for plants and steel buildings exposed to corrosive atmospheres, as in industrial or coastal regions.
- Other uses include heat-resistance paints (up to 200°C), concrete paints, underwater paints, road-marking paints, zinc-rich paints and stoving enamels.

Other uses

Other uses include heat-resistant paints (up to 200°C), concrete paints, underwater paints, road-marking paints, zinc-rich paints and stoving enamels.

Application and drying of the paints

When paint systems are applied in several layers, each coat should be allowed to dry for about 1 - 2 days but not longer. After about 14 days paints which are required to be highly resistant to chemicals will have through-hardened adequately.

PROCESSING

ALPEX CK 450 is fully compatible with the pigments normally used. When pigments containing iron, manganese or lead compounds are used, particularly in the presence of dryers, the storage stability of the paints is adversely affected. The suitability of such pigments should therefore be checked separately in each case.

As a general principle, no dryers should be used in red-lead paints which contain ALPEX CK 450.

As a rule, only small quantities of dryers need be used in combinations of ALPEX CK 450 with alkyd resins, e.g. 0.02 - 0.03% Co metal, calculated on solid AlpeX.

Antiskinning agents

ALPEX CK 450 also is crosslinking by oxydation. Therefore the addition of antiskinning agent like ADDITOL® XL 297, approx. 1.5% calculated on solids of ALPEX CK 450, is recommended.

STORAGE

At temperatures up to 25°C storage stability packed in original containers amounts standard to 365 days.

The expiration date may be extended and COA updated after QC testing of retained samples, only for material in allnex possession.

SAFETY AND HANDLING

Please consult the Safety Data Sheet (SDS) for safety, health, and environmental data available from allnex.